AMENDMENTS

In the Specification

Please amend the specification as follows:

Substitute the paragraph starting at page 1, line 29, with the following:

Off-media calibration has the advantage of not consuming media. Off-media calibration can also be performed automatically, with little impact on users. However, off-media calibration is prone to inaccuracy since the measurement is made in a substitute fashion (e.g. printing on the transport belt) or at some intermediate stage in the printing process. It is necessary, therefore, in order to adjust print parameters during off-media calibration, to rely on correlations made at the factory to determine how density values detected during off-media calibration relates to printing density present when printing is actually performed on-media. A user of the printer may be able to adjust correlation values set at the factory; however, this typically requires that a test page is printed and viewed by the user. The user then makes some ~~judgements~~ judgments and enters adjustment information back into the printer. Several iterations may be required before a user is content with the adjustments made to the correlation values. The adjustment factors provided in any such calibration method must also be predetermined in the factory, and may not be sufficient to compensate for actual variations.

Substitute the paragraph starting at page 4, line 26, with the following:

As shown in Figure 1, a sensor 12 is located adjacent to a transportation belt 11 where sensor 12 can sense the amount of colorant (e.g., toner or ink) present on either the transportation belt 11 or actual media 14. Sensor 12 is, for example, a densitometer, a colorimeter, or a spectrophotometer, or any other device measuring the properties of test ~~patches~~ patches.

Substitute the paragraph starting at page 5, line 24, with the following:

Immediately following on-media calibration, off-media calibration is performed where patches are printed on transportation belt 11 rather than on media sheets 14. This is illustrated by ~~Figure 5 and Figure 6~~ Figure 4 and Figure 5. Patches, represented in ~~Figure 6~~ Figure 5 by a patch 51, a patch 52, a patch 53 and a patch 54 printed on transportation belt 11, are printed with identical amounts of toner or toner as are the patches represented by patches 21 through 26 (shown in Figure 3) printed on-media sheet 15. Sensor 12 is used to measure the densities of the patches placed on transportation belt 11. After completion of off-media calibration, results of the two calibration methods (on-media calibration and off- media calibration) are compared. A current correlation is calculated between on-media calibration and off-media calibration.

Substitute the paragraph starting at page 6, line 28, with the following:

For example, when new media is introduced to the printing system, the full calibration (on-media calibration and off-media calibration) is performed to take into account that different media can have different base properties (color, surface finish, ~~ete~~ etc.), and/or very different ~~response~~ responses to the printer marking system. The full calibration would produce the desired on-media characteristics, and establish the correlation to off-media calibration measurements. In essence, the full calibration cycle (on-media calibration followed by off-media calibration) establishes an accurate correlation between on-media measured calibration values and off-media measured calibration values. The subsequent off-media calibration compensates for drift. Since the customer impact of off-media measurements is very small (potentially non-existent), the off-media calibration can be done frequently, allowing for near-continuous detection and correction of errors. This provides high accuracy, no user ~~judgement~~ judgment, and minimal media wastage.

Substitute the paragraph starting at page 8, line 12, with the following:

When conducting on-media calibrations, the nine patches are printed on-media (e.g., a sheet of paper). The media is conveyed under a sensor, which produces a digital signal for each patch that corresponds to the amount of colorant sensed on the paper. The ~~result~~ results are on-media calibration measured values (M_0, M_1, M_2, M_3, M_4, M_5, M_6, M_7, M_8). During on-media calibration, the parameters of the print engine are varied so that the on-media calibration measured values (M_0, M_1, M_2, M_3, M_4, M_5, M_6, M_7, M_8) are equal or approximately equal to the target measure values (T_0, T_1, T_2, T_3, T_4, T_5, T_6, T_7, T_8).

Substitute the paragraph starting at page 17, line 2, with the following:

A printing device is calibrated. An on-media calibration is performed. During on-media calibration, colorant is placed on print media. A measurement is performed to obtain on-media calibration measured values. The on-media calibration measured values are used to calibrate the printing device. An off-media calibration is performed to obtain off-media calibration measured values. Off-media calibration means that calibration is performed without placing colorant on print media. A correlation is made between the on-media calibration measured values and the off-media calibration measured values. Subsequent off-media calibrations are performed in which the off-media calibration measured values are used along with the correlation between the on-media calibration measured values and the off-media calibration measured values to calibrate the printing device.